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*              U N I V E R S I T Y   O F   U T A H           *
*                                                            *
*     C O M P U T E R   S C I E N C E   D E P A R T M E N T  *
*                                                            *
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                        MONDAY    11/10/80 AT 05:03:52 PM


                    L      EEEE PPPP  RRRR   EEEE  AAA  U   U
                    L     E     P   P R   R E     A   A U   U
                    L     E     P   P R   R E     A   A U   U
                    L     EEEE  PPPP  RRRR  EEEE  AAAAA U   U
                    L     E     P     R R   E     A   A U   U
                    L     E     P     R  R  E     A   A U   U
                     LLLL  EEEE P     R   R  EEEE A   A  UUU


PPPP   CCC  L            M M   AAA  IIIII L          TTTTT X   X TTTTT          1
P   P C   C L           M M M A   A   I   L            T   X   X   T           11
P   P C     L           M M M A   A   I   L            T    X X    T            1
PPPP  C     L           M M M AAAAA   I   L            T     X     T            1
P     C     L           M   M A   A   I   L            T    X X    T            1
P     C   C L           M   M A   A   I   L      ..    T   X   X   T    ..      1
P      CCC  LLLL        M   M A   A IIIII LLLL  ..    T   X   X   T    ..     111
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29-Sep-80 18:24:54-MDT,0000000263;000000000003
Date: 29 Sep 1980 1824-MDT
From: Morrison
Subject: ENV / PCL sizes
To: lepreau

Seems to be about a 20% reduction in size from a .PCL file to a .ENV file,
exclusive of comments in the .PCL file, which could of course, increase that
dramatically.

 3-Oct-80 07:27:11-MDT,0000000473;000000000003
Date: 3 Oct 1980 0727-MDT
From: LEPREAU
Subject: modest pcl hacks
To: morrISON, galwAY, frank
cc: thomas, fish

In <lepreau>dflt.pcl are two of 'em:
df which does a 'define' assuming only a directory or file (so you get
recognition),
and ltnet which does just that.

How does the exec puts the colon right after the logical-name in 'define'?
'device' puts the colon there but will not accept an arbitrary string.
Is there some sort of echo command?

 3-Oct-80 07:31:05-MDT,0000000246;000000000013
Date: 3 Oct 1980 0731-MDT
From: Morrison
Subject: Re: modest pcl hacks
To: LEPREAU
In-Reply-To: Your message of 3-Oct-80 0727-MDT

Did you try supplying the PARSEONLY option when parsing a DEVICE. I believe
that should do it.

 3-Oct-80 08:13:35-MDT,0000001949;000000000003
Date: 3 Oct 1980 0813-MDT
From: Morrison
Subject: PCL library
To: PCL-Hackers: ;

It has been suggested that we should maintain a library of generally
usefull PCL commands. Any comments? Is this the appropriate time to
worry about it, or should we wait until PCL is less volatile?

To start with, I have two suggestions:

1) Keep it as a collection of small .PCL files, each corresponding
   to pretty much a single function (though possibly several
   commands/procedures) so that most users would either want the
   whole thing, or none of it. Thus it will be easy for people to
   build .ENV files incorporating whatever they want, and to rebuild
   them as various objects in the library are altered. In fact, one
   of the first commands in the library could be a "linker", which
   takes a description from a file/string-variable, and builds the
   approriate .ENV file.

2) Enforce an "editorial" policy. If this is to be a public library
   it would be well worth the effort to require that commands look

like the default ones, and that the self documentation be accurate, and standard enough to be understood by the uninitiated. In addition, so that those using locally defined PCL commands not be required to program PCL routines themselves, it is necessary that suitable documentation be available, and that "magic strings" like directory names and the like not be included in the PCL routines (e.g. instead of ·PS:<MORRISON.*>' there should be ·"PS:<" + $username + ".*>"', or some such). Customizable features should be handled with global variables, and should be documented in idiot proof fashion (e.g. rather than "set the variable foobar to ..." there should be "in your COMAND.CMD file include ·SET STRING-VARIABLE FOOBAR ...').

3-Oct-80 11:00:15-MDT,000000682;000000000003
Date: 3 Oct 1980 1100-MDT
From: LEPREAU
Subject: Re: DFLT.PCL
To: Morrison
In-Reply-To: Your message of 3-Oct-80 0816-MDT

It's got the loop now. Appreciate if you'd check it out and give me feedback. One thing sort of subtle: if i didn't put parseonly on a directory token, it used the expanded version and only got the first directory. E.g, df sys: sys:,<foo> --> <subsys>,<foo> and left out all the other goodies.

I don't really understand 'devices', but empirical evidence indicates that nothing changes if i put it in; ie directory grabs everything of interest.

also, had to use FILEL cause otherwise would be screwed when switched diretories..

3-Oct-80 11:49:10-MDT,000000344;000000000003
Date: 3 Oct 1980 1149-MDT
From: LEPREAU
Subject: recursive expansion in pcl
To: morrISON

Just a thought about what i mentioned earlier about sys: expanding and we only get the 1st element; maybe it's possible (&necessary) tp parse the expanded string too?
These q's may be dumb, cause i've never read about the comnd jsys.

3-Oct-80 12:30:14-MDT,00000001296;000000000013
Date: 3 Oct 1980 1230-MDT
From: Morrison
Subject: Re: DFLT.PCL
To: LEPREAU
In-Reply-To: Your message of 3-Oct-80 1100-MDT

I think(?) that the way you're handling devices on the right is correct. It may be that there's some subtlty going on which I don't understand, and which means that there is NO right way. That would explain why the standard DEFINE doesn't do any recognition. There should be no need for the PCL command to have to worry about who is defined and who is not -- just pass the junk on to the real define command, and let it worry about that sort of stuff. Seems very nice.

Two political suggestions. It would be nice if when one gets to the

left side the help message indicates that a carriage return with no spec deletes the device definition. This requires a nearly duplicate parse the first time through, so that different help messages are produced according to whether or not we've started storing up stuff. I also think it whould be called DEFINE. It really is a replacement for the DEFINE command, and shouln't be something else to remember. This requires the docommand at the end to be "docommand original". If you want to be able to use DF as well, just make it a synonym.

3-Oct-80 12:31:40-MDT,00000000231;000000000003
Date: 3 Oct 1980 1231-MDT
From: Morrison
PS-to: last message
Subject: Re: DFLT.PCL
To: LEPREAU
In-Reply-To: Your message of 3-Oct-80 1100-MDT

Ah, in reading over what I just sent -- substitute right for left.

3-Oct-80 14:02:23-MDT,00000868;000000000003
Date: 3 Oct 1980 1402-MDT
From: Morrison
Subject: [Mark Crispin <Admin.MRC at SU-SCORE>: Re: PCL library]
To: LepREAU

Since you were interested, I guess I'll forward any replies ...

Mail from SU-SCORE rcvd at 3-Oct-80 1328-MDT
Date: 3 Oct 1980 1224-PDT
From: Mark Crispin <Admin.MRC at SU-SCORE>
Postal-Address: 12155 Edgecliff Place; Los Altos Hills, CA 94022
Stanford-Phone: (415) 497-1407
Subject: Re: PCL library
To: Morrison at UTAH-20
cc: Frank at UTAH-20
In-Reply-To: Your message of 3-Oct-80 0713-PDT

I like the idea of a PCL library. <MRC>PCLLIB.PCL has my set of commands, although I think the version at Utah is slightly out of date. If you set up a PCL library I would like to have one at SCORE as well, using common PCL sources.

-- Mark --

8-Oct-80 22:52:38-MDT,0000457;000000000003
Date: 8 Oct 1980 2252-MDT
From: LEPREAU
Subject: Re: DFLT.PCL
To: Morrison
In-Reply-To: Your message of 3-Oct-80 1230-MDT

I agree that calling df DEFINE would be nice, but if it were really to be something used by many as the default, i think it would mean too high a penalty in efficiency. (i'm thinking about the multitude of def's in all those login.cmd files out there (and since comand.cm can't do much about it).)

9-Oct-80 07:08:39-MDT,00000001741;000000000013

Date: 9 Oct 1980 0708-MDT
From: Morrison
Subject: Re: DFLT.PCL
To: LEPREAU
In-Reply-To: Your message of 8-Oct-80 2252-MDT

What the hell are you talking about -- efficiency??? So what if a hundred defines take 10 times as long once per login -- that's nothing. In reality you're probably talkiing more about 20 defines, and a fctor of something less than 5 in efficiency, probably more like two or three, though I'm no expert on the internals of PCL. But even if it were interpreted TECO, what te hell is this about causeing yet more sins in the name of bloody efficiency? And any way, if folks were really worried about that extra 10 ms they could always declare the define command in their login.cmd file after the logical device names and at least have a nice define in their top level exec, which with multi-forkking is normally the only one you have around anyway.

For the moment their's a bit more trouble in that there's some sort of trouble with PCL commands inside of take files. It may be that your DEFINE doesn't fall prey to it, but if it does, if define were redefined in the comand.cmd file the first define in the login.cmd file would hang -- the command would be executed correctly, but never return. I don't understand what's going on, but I have had that problem. Still, that should go away with the next release.

May I suggest you have a long talk with your pseudo-officemate Eric about efficiency, and read up what there is to say about it in the Elements of Programming Style and in Kernighan and Plauger's Software Engineering. And consider how your time compares to a silly machine's time in overall value, particularly for things the machine does 10^5 times faster?

 9-Oct-80 07:20:23-MDT,000000000262;000000000003
Date: 9 Oct 1980 0720-MDT
From: Morrison
PS-to: Re: DFLT.PCL
Subject: Efficiency
To: LeprEAU

A better solution to the LOGIN.CMD "problem" is simply to use "ORIGINAL DEFINE" therein. I believe this will even take care of the bug I described.
----
 even if it were interpreted TECO, what
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efficiency? And any way, if folks were really worried about that extra 10 ms
they could always declare the define command in their login.cmd file
after the logical device names and at least have a nice define
in their top level exec, which with multi-forkking is normally the only one
you have around anyway.

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fall prey to it, but if it does, if define were redefined in the comand.cmd
file the first define in the login.cmd file would hang -- the command would
be executed correctly, but never return. I don't understand what's going on,

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********************************************************************************************************************************
        USER: LEPREAU                   FILE NAME: PCL_MAIL.TXT.1       ACCOUNT: OVERHEAD               PAGES: 000006
********************************************************************************************************************************
        USER: LEPREAU                   FILE NAME: PCL_MAIL.TXT.1       ACCOUNT: OVERHEAD               PAGES: 000006
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        USER: LEPREAU                   FILE NAME: PCL_MAIL.TXT.1       ACCOUNT: OVERHEAD               PAGES: 000006
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        USER: LEPREAU                   FILE NAME: PCL_MAIL.TXT.1       ACCOUNT: OVERHEAD               PAGES: 000006
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